

## **BUDGET INCREASE REQUEST**

For

Budget Year

**FY 2013**

prepared by

UDOT

Maintenance Planning Division  
4501 South 2700 West  
Salt Lake City, Utah 84114  
801-965-4116

**August 1, 2011**

# SUMMARY

<b>FY</b>	<b>LANE MILES</b>
2013	335.71
2012	225.00
2011	447.00
2010	609.00
2009	430.32
2008	273.00
2007	342.90
2006	251.90
2005	482.00
2004	322.50
<b>TOTAL</b>	<b>3719.33</b>

TIF REQUEST (88.7%)	\$1,692,804
CHNF REQUEST (11.3%)	\$215,656
	-----
TOTAL REQUEST TIF/CHNF	\$1,908,460

**/SUMMARY**

UDOT statewide maintenance budget increase request for FY 2013 is.

**\$7,114,254****PREVIOUS YEARS UNFUNDED FY12, 11, 10 & 09 Budget Requests. \$1,876,000**

Detailed information follows:

**Features Increase FY13**

UDOT Statewide maintenance budget request, including FTE needs, for FY 2013 is \$2,484,254. This year, because of the recently funded projects from the Transportation Investment Fund (TIF) and the Critical Highway Needs Fund (CHNF), the request is divided between these two funding sources:

<b>TRANSPORTATION FUND</b>	<b>\$575,794</b>
<b>TIF/CHNF</b>	<b>\$1,908,460</b>

New construction, reconstruction, betterments and capacity enhancement projects constantly add new features that require maintenance. Even new roads include signs that get damaged, markings that require painting, surface areas that need snow removal, etc. Increased features require budget increases to maintain the same level of service as delivered to existing roads.

<b>Transportation Fund</b>	<b>Lane Miles</b>	<b>FTE Need</b>	<b>Amount</b>
Region 1	4.44	.15	\$32,856
Region 2	0.12	.00	\$888
Region 3	68.08	2.27	\$503,792
Region 4	5.17	.17	\$38,258
<b>TOTALS</b>	<b><u>77.81</u></b>	<b><u>2.59</u></b>	<b><u>\$575,794</u></b>

<b>TIF/CHNF</b>	<b>Lane Miles</b>	<b>FTE Need</b>	<b>Amount</b>
Region 1	32.73	1.09	\$242,202
Region 2	18.38	.61	\$136,012
Region 3	192.21	6.41	\$1,422,354
Region 4	14.58	.49	\$107,892
<b>TOTALS</b>	<b>257.90</b>	<b>8.60</b>	<b>\$1,908,460</b>

<b>TOTAL Code 1 &amp; TIF/CHNF</b>	<b><u>335.71</u></b>	<b><u>11.19</u></b>	<b><u>\$2,484,254</u></b>
------------------------------------	----------------------	---------------------	---------------------------

TIF 88.7 %  
CHNF 11.3

**LANDS AND BUILDINGS SUPPLEMENT FOR FY12**

After 4 years of use, the sewer system for the **Bear Lake** Overlook rest area failed. A total reconstruction, based upon the actual usage, was required in order to remain operational. This request is to pay for the reconstruction.

**Lands & Buildings (One Time Cost)****\$500,000**

### EQUIPMENT NEEDS

We are requesting restoration of equipment purchasing costs to the pre-FY2009.

Equipment Replacement cost	\$3,500,000
Replace Region Four West Snow Blowers	<u>\$ 630,000</u>
<b>Total Equipment requests</b>	<b>\$4,130,000</b>

### UNFUNDED FY10 TRAFFIC CONTROL (Work Zone Device Replacement)

UDOT changed the work zone sign and traffic control device standard for work zone on January 1, 2008 to comply with MUTCD standards. The change included retroreflectorization of all devices and a higher intensity retroreflective sheeting for all work zone signs and traffic control devices such as cones and barrels. Work zone traffic control signs and devices are also required to meet the MUTCD Retroreflectivity standard which went into effect January 22, 2008. Funding request is based on actual on-hand inventory of work zone traffic control devices.

<b>Statewide Needs</b>	<b>\$1,310,000</b>
------------------------	--------------------

### UNFUNDED FY09 RETENTION BASIN (ENVIRONMENTAL COMPLIANCE)

UDOT built asphalt-lined retention ponds at its maintenance stations to prevent salt-rich runoff from escaping our facilities. Our program was found noncompliant by State Division of Environmental Quality. The basins need to be modified to meet DEQ requirements or be replaced with self-contained brine making equipment and storage tanks.

Replace brine-making system 14 locations X \$28,000	\$392,000
Rebuild basins six locations X \$20,000	\$120,000
Repair basins six locations X \$9,000	<u>\$ 54,000</u>
<b>Total costs</b>	<b>\$566,000</b>



**SUMMARY**

UDOT statewide maintenance budget increase request for FY 2013 is.

\$7,515,488**PREVIOUS YEARS UNFUNDED FY12, 11, 10 & 09** Budget Requests. \$5,026,000

Detailed information follows:

**DROP**

~~Note: All unfunded features added through FY 2012 are reflected in our total backlog of 122 FTEs which have been accumulated over the last ten years.~~

**Features Increase FY13**

UDOT Statewide maintenance budget request, including FTE needs, for FY 2013 is \$2,435,488. This year, because of the recently funded projects from the Transportation Investment Fund (TIF) and the Critical Highway Needs Fund (CHNF), the request is divided between these two funding sources:

<b>TRANSPORTATION FUND</b>	<b>\$527,028</b>
<b>TIF/CHNF</b>	<b>\$1,908,460</b>

New construction, reconstruction, betterments and capacity enhancement projects constantly add new features that require maintenance. Even new roads include signs that get damaged, markings that require painting, surface areas that need snow removal, etc. Increased features require budget increases to maintain the same level of service as delivered to existing roads.

<b>Transportation Fund</b>	<b>Lane Miles</b>	<b>FTE Need</b>	<b>Amount</b>
Region 1	4.44	.16	\$32,856
Region 2	0.12	.00	\$888
Region 3	61.49	2.20	\$455,026
Region 4	5.17	.18	\$38,258
<b>TOTALS</b>	<b><u>71.22</u></b>	<b><u>2.54</u></b>	<b><u>\$527,028</u></b>
<b>TIF/CHNF</b>	<b>Lane Miles</b>	<b>FTE Need</b>	<b>Amount</b>
Region 1	32.73	1.17	\$242,202
Region 2	18.38	.66	\$136,012
Region 3	192.21	6.86	\$1,422,354
Region 4	14.58	.52	\$107,892
<b>TOTALS</b>	<b><u>257.90</u></b>	<b><u>9.21</u></b>	<b><u>\$1,908,460</u></b>
<b>TOTAL Code 1 &amp; TIF/CHNF</b>	<b><u>329.12</u></b>	<b><u>11.75</u></b>	<b><u>\$2,435,488</u></b>

**LANDS AND BUILDINGS SUPPLEMENT FOR FY12**

After 4 years of use, the sewer system for the **Bear Lake** Overlook rest area failed. A total reconstruction, based upon the actual usage, was required in order to remain operational. This request is to pay for the reconstruction.

**Lands & Buildings (One Time Cost)****\$500,000**

## **DROP**

### **AVALANCHE CONTROL (LITTLE COTTONWOOD CANYON)**

Avalanche control in the Valerie's Slide area is currently done with the use of recoilless rifles. The current gun mount above Snowbird Resort is used for avalanche control on the north side of SR 210. The rifles and ammunition are provided through an agreement with the U. S. Army. The Army is going to cease providing this ammunition next year. This will necessitate that UDOT make a change in it's avalanche control program in this area.

UDOT is proceeding with the construction of Gaz Ex exploders. This request is for phase 2 of the project. There are currently two exploders in place. 7 more are needed. This method of control is the safest, eliminating all need for firing live rounds over a populated area. It is, of all the options, the least expensive over the long term.

\_\_\_\_\_ **Total Cost** \_\_\_\_\_ **\$450,000**

### **EQUIPMENT NEEDS**

We are requesting restoration of equipment purchasing costs to the pre-FY2009.

Equipment Replacement cost	\$3,500,000
Replace Region Four West Snow Blowers	<u>630,000</u>
<b>Total Equipment requests</b>	<b><u>\$4,130,000</u></b>

## **DROP**

### **UNFUNDED FY12 LANDS AND BUILDINGS REQUEST**

Motor Carriers is tasked with enforcing safety regulations as it regards the trucking industry. Currently, there are only two ports of entry, St. George and Echo that provide an enclosed space where these inspections may be conducted. This request will provide funding for enclosed inspection bays at the remaining locations. By providing these enclosed bays, more inspections will be able to be done, thus promoting safety within the trucking community and protecting the traveling public. This one-time \$1,000,000 request should be sufficient to provide these necessary facilities at the remaining sites.

**Lands & Buildings (One time)** \_\_\_\_\_ **\$1,000,000**

## **DROP**

### **UNFUNDED FY12 REGION TWO ROCK SLIDE NETTING IN BIG COTTONWOOD CANYON**

Currently, there is a major rock slide area in the lower part of the canyon that has chain link fencing that is being used as rock slide netting. The chain link is not the proper treatment here and needs to be replaced with a system design for rock fall protection.

**Rock Netting Cost** \_\_\_\_\_ **\$750,000**



**DROP****UNFUNDED FY11 TRAFFIC SIGN RETROREFLECTIVITY COMPLIANCE**

FHWA published a new "**Maintaining Sign Retroreflectivity**" rule effective Jan. 22, 2008, as a supplement to the *Manual on Uniform Traffic Control Devices (MUTCD)*. UDOT must establish and implement a sign assessment or management method to maintain minimum levels of sign retroreflectivity by January 2012. The cost to replace all currently installed sign faces would be \$17,800,000. By evaluating each sign and replacing those that do not meet the new standard, the cost to comply with federal rule for surface mount signs by January 1, 2015, will be \$5,000,000. The cost to comply with overhead sign retroreflectivity or illumination by January 1, 2018, will be \$2,400,000. After 2018 \$250,000 additional annual funding will be needed to replace sign faces that fall below MUTCD standards. This request details how UDOT will manage sign retroreflectivity. This need is ongoing and estimated amount is \$700,000.

\_\_\_\_\_ **Total Cost**

**\$700,000**

**DROP****UNFUNDED FY11 CULVERT MANAGEMENT**

Research conducted by the Hydraulics Division, Research Division and Asset Management Division during the last six years demonstrated that many culverts throughout the state are approaching or beyond their design life or are near the end of their useful life due to corrosion, decay, pipe misalignment and other failures. This request establishes a proactive culvert service life extension program (SLEP).

The cost of the request for equipment, completing a statewide condition inventory and correcting the top priority deficient culverts is:

\_\_\_\_\_ **Total Cost**

**\$700,000**

**UNFUNDED FY10 TRAFFIC CONTROL (Work Zone Device Replacement)**

UDOT changed the work zone sign and traffic control device standard for work zone on January 1, 2008. The change included retroreflectorization of all devices and a higher intensity retroreflective sheeting for all work zone signs and traffic control devices such as cones and barrels. Work zone traffic control signs are also required to meet the MUTCD Retroreflectivity standard which went into effect January 22, 2008. Funding request is based on actual on-hand inventory of work zone traffic control devices.

**Statewide Needs**

**\$1,310,000**

**UNFUNDED FY09 RETENTION BASIN (ENVIRONMENTAL COMPLIANCE)**

UDOT built asphalt-lined retention ponds at its maintenance stations to prevent salt-rich runoff from escaping our facilities. Our program was found noncompliant by State Division of Environmental Quality. The basins need to be modified to meet DEQ requirements or be replaced with self-contained brine making equipment and storage tanks.

Replace brine-making system 14 locations X \$28,000

**\$392,000**

Rebuild basins six locations X \$20,000

**\$120,000**

Repair basins six locations X \$9,000

**\$ 54,000**

**Total costs**

**\$566,000**

## SUMMARY

UDOT statewide maintenance budget increase request for FY 2013 is.

\$7,515,488

**PREVIOUS YEARS UNFUNDED FY12, 11, 10 & 09 Budget Requests.** \$5,026,000

Detailed information follows:

Note: All unfunded features added through FY 2012 are reflected in our total backlog of ~~122~~ FTEs which have been accumulated over the last ten years.

### Features Increase FY13

UDOT Statewide maintenance budget request, including FTE needs, for FY 2013 is \$2,435,488. This year, because of the recently funded projects from the Transportation Investment Fund (TIF) and the Critical Highway Needs Fund (CHNF), the request is divided between these two funding sources:

<b>TRANSPORTATION FUND</b>	<b>\$527,028</b>
<b>TIF/CHNF</b>	<b>\$1,908,460</b>

New construction, reconstruction, betterments and capacity enhancement projects constantly add new features that require maintenance. Even new roads include signs that get damaged, markings that require painting, surface areas that need snow removal, etc. Increased features require budget increases to maintain the same level of service as delivered to existing roads.

Transportation Fund	Lane Miles	FTE Need	Amount
Region 1	4.44	.16	\$32,856
Region 2	0.12	.00	\$888
Region 3	61.49 <i>Do not forward this will end up -</i>	2.20	\$455,026
Region 4	5.17	.18	\$38,258
<b>TOTALS</b>	<b><u>71.22</u></b>	<b><u>2.54</u></b>	<b><u>\$527,028</u></b>

TIF/CHNF	Lane Miles	FTE Need	Amount
Region 1	32.73	1.17	\$242,202
Region 2	18.38	.66	\$136,012
Region 3	192.21	6.86	\$1,422,354
Region 4	14.58	.52	\$107,892
<b>TOTALS</b>	<b><u>257.90</u></b>	<b><u>9.21</u></b>	<b><u>\$1,908,460</u></b>

<b>TOTAL Code 1 &amp; TIF/CHNF</b>	<b><u>329.12</u></b>	<b><u>11.75</u></b>	<b><u>\$2,435,488</u></b>
------------------------------------	----------------------	---------------------	---------------------------

### LANDS AND BUILDINGS SUPPLEMENT FOR FY12

After 4 years of use, the sewer system for the Bear Lake Overlook rest area failed. A total reconstruction, based upon the actual usage, was required in order to remain operational. This request is to pay for the reconstruction.

**Lands & Buildings (One Time Cost)**

**\$500,000**



out.

### AVALANCHE CONTROL (LITTLE COTTONWOOD CANYON)

Avalanche control in the Valerie's Slide area is currently done with the use of recoilless rifles. The current gun mount above Snowbird Resort is used for avalanche control on the north side of SR-210. The rifles and ammunition are provided through an agreement with the U. S. Army. The Army is going to cease providing this ammunition next year. This will necessitate that UDOT make a change in it's avalanche control program in this area.

UDOT is proceeding with the construction of Gaz-Ex exploders. This request is for phase 2 of the project. There are currently two exploders in place. 7 more are needed. This method of control is the safest, eliminating all need for firing live rounds over a populated area. It is, of all the options, the least expensive over the long term.

**Total Cost**

**\$450,000**

### EQUIPMENT NEEDS

We are requesting restoration of equipment purchasing costs to the pre-FY2009.

Equipment Replacement cost

\$3,500,000

Replace Region Four West Snow Blowers

\$ 630,000

**Total Equipment requests**

**\$4,130,000**

### UNFUNDED FY12 LANDS AND BUILDINGS REQUEST

Motor Carriers is tasked with enforcing safety regulations as it regards the trucking industry. Currently, there are only two ports of entry, St. George and Echo that provide an enclosed space where these inspections may be conducted. This request will provide funding for enclosed inspection bays at the remaining locations. By providing these enclosed bays, more inspections will be able to be done, thus promoting safety within the trucking community and protecting the traveling public. This one-time \$1,000,000 request should be sufficient to provide these necessary facilities at the remaining sites.

**Lands & Buildings (One time)**

**\$1,000,000**

*C. Rad will do this*

### UNFUNDED FY12 REGION TWO ROCK SLIDE NETTING IN BIG COTTONWOOD CANYON

Currently, there is a major rock slide area in the lower part of the canyon that has chain link fencing that is being used as rock slide netting. The chain link is not the proper treatment here and needs to be replaced with a system design for rock fall protection.

**Rock Netting Cost**

**\$750,000**

*project*



### UNFUNDED FY11 TRAFFIC SIGN RETROREFLECTIVITY COMPLIANCE

FHWA published a new "Maintaining Sign Retroreflectivity" rule effective Jan. 22, 2008, as a supplement to the *Manual on Uniform Traffic Control Devices (MUTCD)*. UDOT must establish and implement a sign assessment or management method to maintain minimum levels of sign retroreflectivity by January 2012. The cost to replace all currently installed sign faces would be \$17,800,000. By evaluating each sign and replacing those that do not meet the new standard, the cost to comply with federal rule for surface mount signs by January 1, 2015, will be \$5,000,000. The cost to comply with overhead sign retroreflectivity or illumination by January 1, 2018, will be \$2,400,000. After 2018 \$250,000 additional annual funding will be needed to replace sign faces that fall below MUTCD standards. This request details how UDOT will manage sign retroreflectivity. This need is ongoing and estimated amount is \$700,000.

Total Cost

Project

\$700,000

### UNFUNDED FY11 CULVERT MANAGEMENT

Research conducted by the Hydraulics Division, Research Division and Asset Management Division during the last six years demonstrated that many culverts throughout the state are approaching or beyond their design life or are near the end of their useful life due to corrosion, decay, pipe misalignment and other failures. This request establishes a proactive culvert service life extension program (SLEP).

The cost of the request for equipment, completing a statewide condition inventory and correcting the top priority deficient culverts is:

Total Cost

Project

\$700,000

↑ To comply with MUTCD standards.

### UNFUNDED FY10 TRAFFIC CONTROL (Work Zone Device Replacement)

UDOT changed the work zone sign and traffic control device standard for work zone on January 1, 2008. The change included retroreflectorization of all devices and a higher intensity retroreflective sheeting for all work zone signs and traffic control devices such as cones and barrels. Work zone traffic control signs are also required to meet the MUTCD Retroreflectivity standard which went into effect January 22, 2008. Funding request is based on actual on-hand inventory of work zone traffic control devices.

Statewide Needs

Keep

\$1,310,000

### UNFUNDED FY09 RETENTION BASIN (ENVIRONMENTAL COMPLIANCE)

UDOT built asphalt-lined retention ponds at its maintenance stations to prevent salt-rich runoff from escaping our facilities. Our program was found noncompliant by State Division of Environmental Quality. The basins need to be modified to meet DEQ requirements or be replaced with self-contained brine making equipment and storage tanks.

Replace brine-making system 14 locations X \$28,000

\$392,000

Rebuild basins six locations X \$20,000

\$120,000

Repair basins six locations X \$9,000

\$ 54,000

Total costs

\$566,000

Keep



# FTE NEEDS SINCE FY 2003

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL	BACKLOG
Statewide	343.2	216	482	251.9	342.9	273	430.32	609	265	225	3,438.32	122.80

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	TOTAL FTE
FTE Added	0	0	0	0	0	15	0	(13)	0	0	2

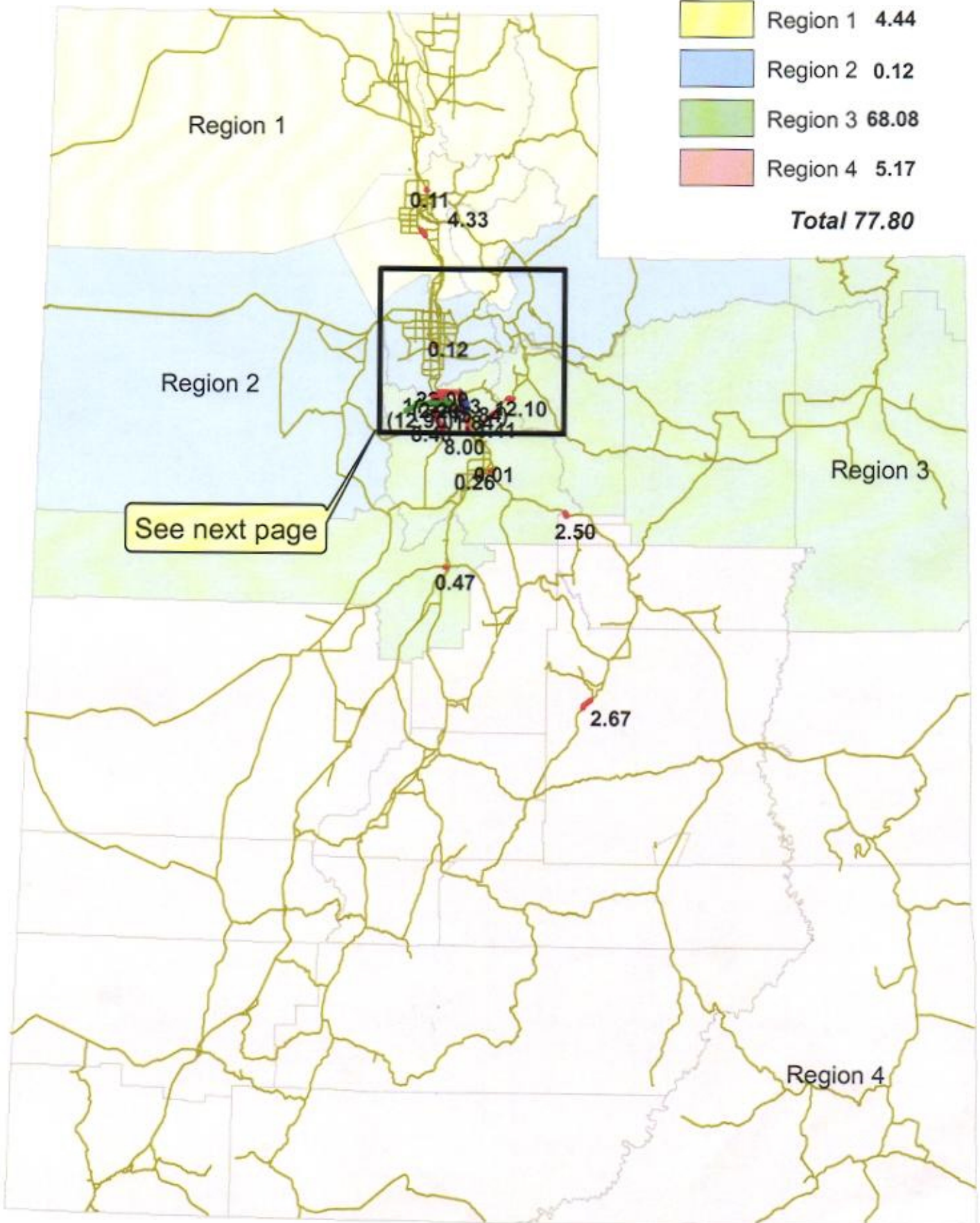
**FEATURES INCREASE**

# 2013 Lane-Mile Increases

## Transportation Fund Projects

Region 1	4.44
Region 2	0.12
Region 3	68.08
Region 4	5.17

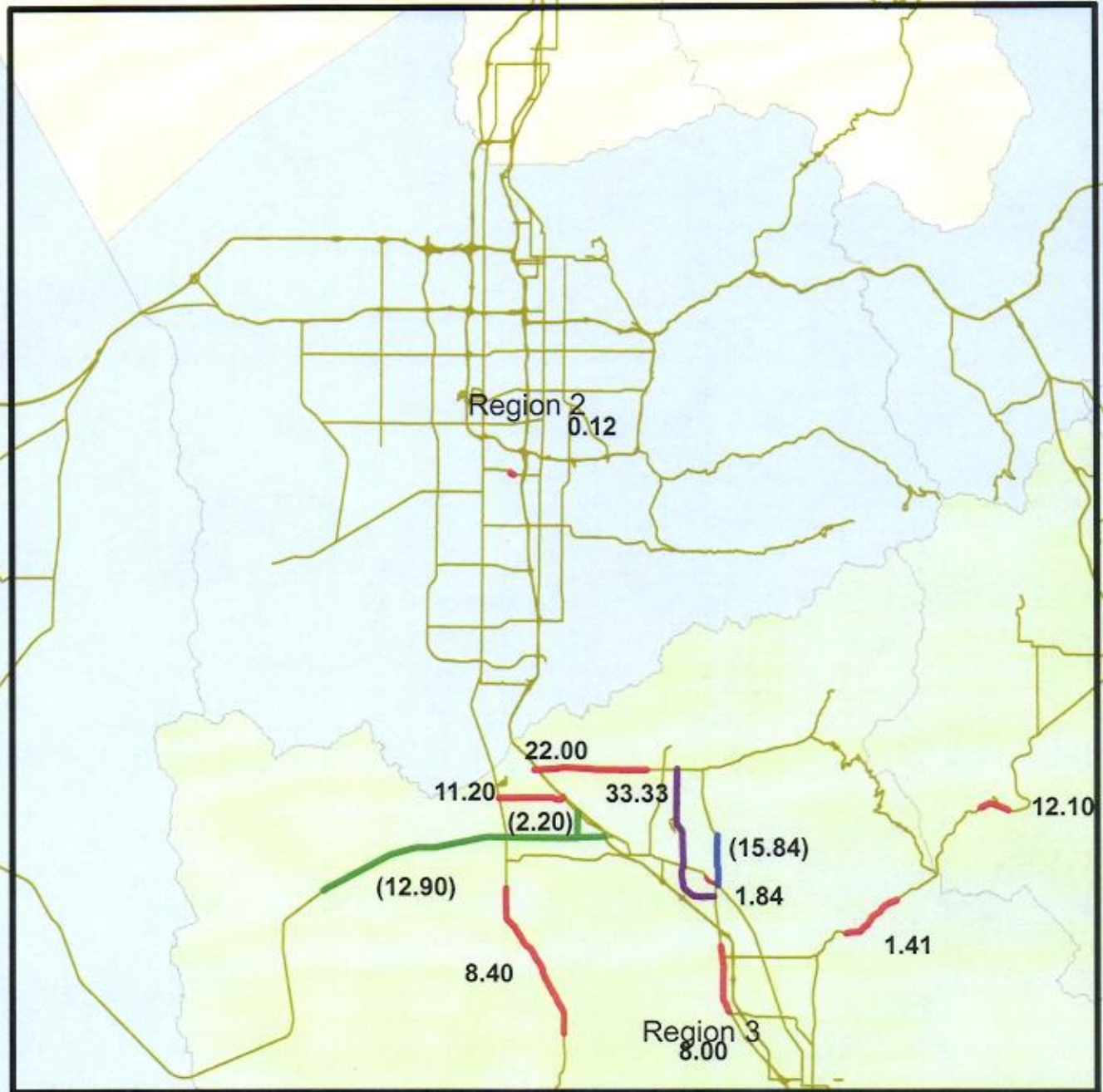
**Total 77.80**





Region 1

Region 2  
0.12



- Acquired from Utah County
- Transferred to Utah County
- Transferred to Lehi City

0.01

0.26



Additions to the system that will require maintenance beginning in FY 2013 (Transportation Fund projects)

Reg. 1	PIN	Project Location	Project Concept	Added Lane Miles*
	6467	I-15; SR-108 TO SR-193	Auxiliary lanes and ramp improvements	4.33
	7441	SR-204 & North Street, Harrisville	Construct new traffic signal	0.11

Reg. 1 Total 4.44

Reg. 2	PIN	Project Location	Project Concept	Added Lane Miles*
	7735	7800 South Bingham Junction Blvd., Midvale City	Intersection improvement and signal installations	0.12

Reg. 2 Total 0.12

Reg. 3	PIN	Project Location	Project Concept	Added Lane Miles*
	6114	Traffic Signal At SR-164 & Del Monte, MP 2.3, Spanish Fork	Construct traffic signal	0.26
	7970	Railroad Crossing Near Maple Mountain High School	RR crossing upgrades	0.01
	4933	Nephi Corridor Improvement	Roadway and railroad crossing improvements	0.47
	6469	US-189; HEBER TO PROVO CANYON	Add passing lane	12.10
	8223	Provo Cnyn MP 9 to 12	Install median surface treatment	1.41
	8061	SR-114; Geneva Road, Provo to Orem	Roadway widening	8.00
	none	Utah County Blvd.; SR-114 to SR-92	Widen to 5 lanes and reconstruct (Acquired from Utah County)	33.33
	none	SR-146, complete route	Transfer to Utah County	(15.84)
	3733	SR-89; State St Railroad Brdg, Pleasant Grove	Widen to 7 lanes	1.84
	6692	MVC - 2100 NORTH; REDWOOD ROAD TO I-15	New construction	11.20
	6690	SR-92, LEHI TO HIGHLAND	Roadway reconstruct with widening	22.00
	5336	SR-68, MP23.3 TO 400 SOUTH (MP 30.5)	Reconstruct and widen to 3 lanes	8.40
	none	SR-73, Redwood Rd. to 850 E., Lehi	Transferred to Lehi City	(12.90)
	none	SR-197, complete route	Transferred to Lehi City	(2.20)

Reg. 3 Total 68.08

Reg. 4	PIN	Project Location	Project Concept	Added Lane Miles*
	4161	US-6; Tucker MP 203 to 204.2	Widen to 4 lanes	2.50
	6150	SR-10; MP 30.8 TO MP 34.0	Bituminous pavement rehabilitation	2.67

Reg. 4 Total 5.17

**Statewide Total 77.80**

\*-A Surface Area is an area 1 mile (5280 ft.) long and one lane (12 ft.) wide. It's value is generally larger than the Lane Mile value and represents the total surface area that requires maintenance activities. Surface area calculations account for average shoulder widths beyond the width of the lanes. For example: A 1 mile long road that has 2-12 ft. lanes, with average shoulder widths of 6 ft. on each side, would have an average overall average width of 36 ft. The number of Lane Miles would be 1 mile x 2 lanes = 2 Lane Miles. The number of Surface Areas would be (1 mile x 36 ft./12) = 3 Surface Areas.



**REQUEST FOR INCREASE IN FUNDS FOR FY 2013 BUDGET - SUPPORTING DETAIL**

Attach additional supporting detail if necessary

<b>Description:</b>		<b>Maintenance Cost Increase due to added features-Transportation</b>		<b>Priority No. 1</b>
<b>Fund Projects</b>				
<b>Program Name:</b>	Feature Inventory	Check One: Ongoing	One-time <input checked="" type="checkbox"/>	<b>Legislation Needed? No</b>
Provide a three-year history and two-year projection of the workload, caseload, or other measure for this program or service:				
FY 2009 Actual:		FY 2012 Projected Total:		
FY 2010 Actual:		FY 2013 Projected Total:		\$575,794
FY 2011 Actual:		FY 2013 Projected % Increase:		

In the space below, show **computation details** outlining how the requested amount is determined. Include FTE needed & the payroll cost for each; additional space requirements; the types and amounts of equipment and related cost; the number of individuals served by the request and the annual service cost per individual; and similar data for all other expenses.

Estimated cost increase due to transportation system improvement is calculated by determining the number of additional items requiring maintenance, then multiplying by three-year average statewide unit cost to maintain those items during FY2008-2010. FY2010 is the last full reporting year available at the time the estimate was prepared.

No indirect charges were included as it is assumed that station operating costs, such items as utilities, building repair, training, leave, fixed equipment costs, etc, will not increase significantly due to increasing workload.

Costs for each type road component, such things as pavement, guardrail, drains, signs, paint striping, are summed for each region and the total estimated cost increased is summed.

For ease of presentation, the number of lane-miles of added pavement was selected to represent the diverse costs going into the total cost. This was done to allow a representative measure of changes rather than requiring the reader to plow through pages of breakouts. Additional features are derived from the projects that have been completed in the previous fiscal year and are scheduled to be completed by the end of 2012 calendar year. These projects were initiated in previous year's Statewide Transportation Improvement Plan, each of which has a potential of a maximum of 80 classes of additional items requiring maintenance. To present this data in other than a condensed representation would burden the reader.

The increases are presented by region with an accompanying map that shows relative geographic distribution of added pavements.

Individuals served

Road users in all twenty nine counties where major and minor projects added roadway features requiring maintenance.

**Budget Increase Summary**

Financing	FY 2013
General Fund	
School Funds	
Transportation Fund	575,794
Federal Funds	
Dedicated Credits	
Restricted Funds	
Transfers (specify)	
Other (specify)	
Beginning Balance	
<b>Total Financing</b>	<b>\$575,794</b>

Expenditures	FY 2013
Personal Services	
In-State Travel	
Out-of-State Travel	
Current Expense	575,794
DP Current Expense	
DP Capital	
Capital Outlay	
Pass Thru/Other	
<b>Total Expenditures</b>	<b>\$575,794</b>
<b>Positions:</b>	

**Percentage Increase of Request**

FY2013 Base Budget for this Program	
FY2013 Requested % Increase	0.0%

Department: Transportation  
Line Item/Division:

Contact: Richard Clarke  
Phone Number: 801-965-4120

**REQUEST FOR INCREASE IN FUNDS FOR FY 2013 BUDGET**

Prepare separate Forms 400 for each budget increase - Attach Form 400A with each Form 400

<b>Description:</b>		<b>Maintenance Cost Increase due to added features-Transportation Fund</b>	<b>Priority No. 1</b>
<b>Program Name:</b>		<b>Feature Inventory</b>	<b>Check One:</b> Ongoing    One-time <input checked="" type="checkbox"/> X
<b>Projects</b>		<b>Legislation Needed?</b> No	

*Please provide a detailed description of this request including the problem or need this request will resolve.  
(all financial calculations should be included on Form 400A)*

77.80 lane-miles of additional roadway will be added to the state system during FY2013 that require routine maintenance activities. In order to maintain these additional pavements and roadways in an acceptable operating condition, additional funding is needed. It is imperative that these investments in infrastructure be maintained to ensure safety for the traveling public.

*What changes in program(s), service(s), expenditure(s), fee(s), etc. will be made if this request is not funded?*

If this request is not funded, the level of service on Utah roads will decrease, because the added lane miles will dilute resource availability for maintenance needs on all roads in the state system. New pavements, safety features, bridges, and roadside appurtenances will require service. Existing roads will continue to require maintenance. Maintenance crews will be constrained by having to spread existing work hours, equipment, and funding to cover more lane-miles. The result will be decreased service levels.

*Indicate any additional funding above the amount being requested that might be required for this request in future years:*

Future growth in the number of lane-miles maintained will further reduce funding available for maintaining the existing system. As long as capacity improvements are made by adding lanes, safety improvements, adding freeway interchanges, and widening roads, there will be additional physical features to maintain. Maintaining these added pavements requires additional funding to maintain current levels of service.

*What are the goal(s), objective(s), and performance measure(s) that directly relate to this request; and how will they be impacted?*

Following the philosophy that "Good Roads Cost Less", UDOT's goal is to preserve and maintain the transportation infrastructure. UDOT annually establishes a level of service for each roadway in the state. These target service levels are based on traffic volume, safety considerations, and integration of the roadway in the overall state transportation system. A key element of system preservation is proactive maintenance. Proactive maintenance consists of those activities done on a routine basis to keep the road network functioning safely, including filling potholes, cleaning drains, paint striping, and snow removal. Attainment of service levels and defining proactive maintenance activities is measured using the Maintenance Management Quality Assurance (MMQA) program.

*Please fill out this section if this request is mandatory (mandatory requests are more likely to be funded)*

*What is the authority reference mandating this request? (i.e. federal law, state law, court action, governor's initiative)*

*Describe why you think this request meets a mandatory definition. (public health and safety requests must constitute an emergency or critical need)*

Department: Transportation

Contact: Richard Clarke

Line Item/Division:

Phone Number: 801-965-4120

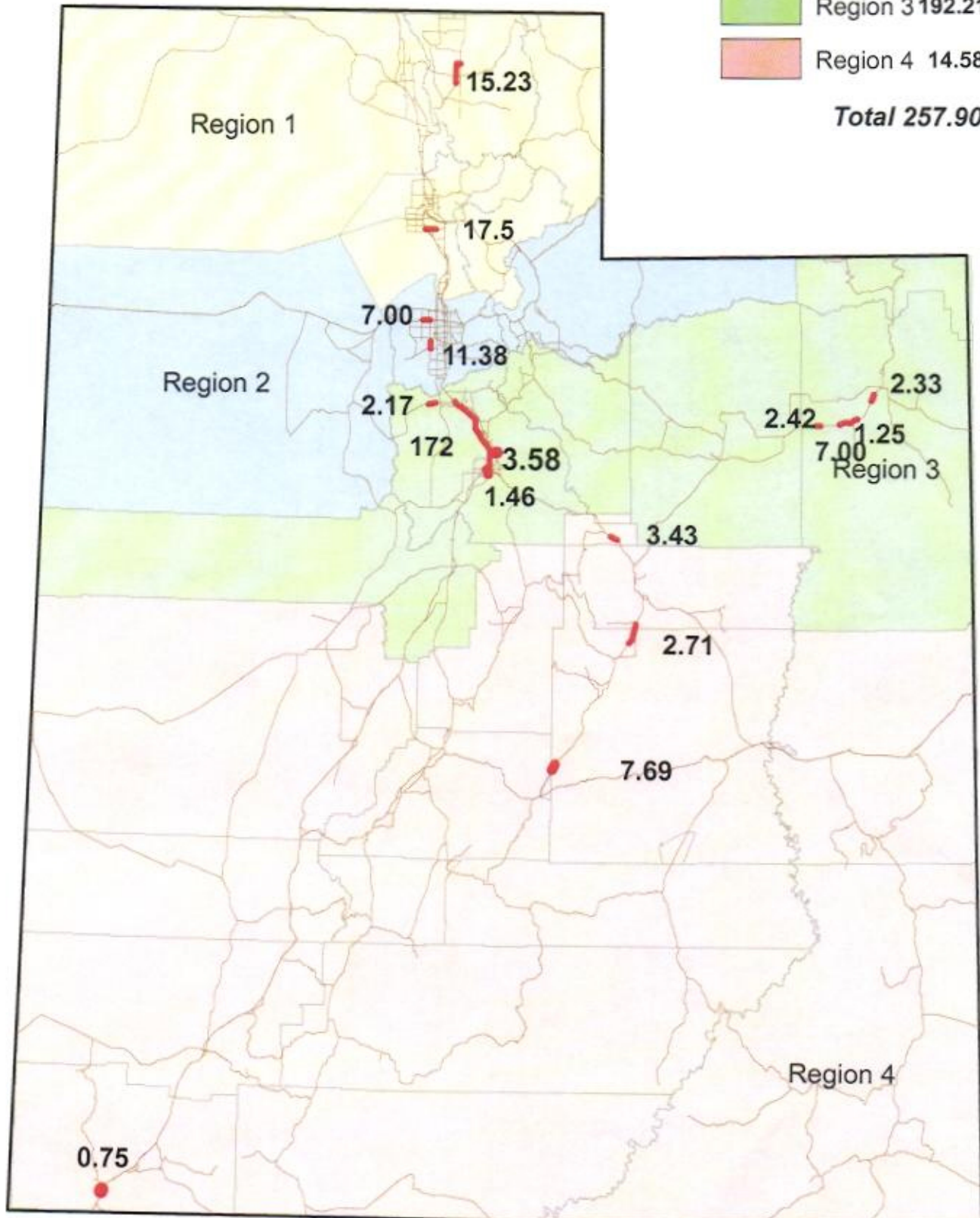


# 2013 Lane-Mile Increases

## TIF/CHNF Projects

Region 1	32.73
Region 2	18.38
Region 3	192.21
Region 4	14.58

**Total 257.90**





Additions to the system that will require maintenance beginning in FY 2013 (TIF/CHNF projects)

Reg. 1	Pin	Project Location	Project Concept	Added Lane Miles*
	7054	SR-193 EXTENSION, 2000 WEST TO I-15, DAVIS COUNTY	Construct roadway extension	17.50
	9413	SR-252; 1000 WEST LOGAN, CACHE COUNTY Phase II	Reconstruction - added capacity	15.23

**Reg. 1 Total** **32.73**

Reg. 2	Pin	Project Location	Project Concept	Added Lane Miles*
	6385	SR-201; BANGERTE HIGHWAY TO 5600 WEST	Roadway reconstruction with widening	7.00
	7137	SR-154; Bangerter at 7800 S, 7000 S, & 6200 S	Reconstruct Intersections	11.38

**Reg. 2 Total** **18.38**

Reg. 3	Pin	Project Location	Project Concept	Added Lane Miles*
	4154	I-15 Corridor, Lehi to Spanish Fork}	Capacity Improvement - Roadway reconstruction with widening	172.00
	5503	I-15 & SR-77 (400 South), Interchange - Springville	Reconstruct interchange	3.58
	5753	SR-198;SPANISH FK MAIN ST,FAIRGROUNDS TO ARROWHEAD	Roadway reconstruction with widening	1.46
	6471	US-40; MP 139 TO MP 141, ADD PASSING LANES	Add passing lanes	2.33
	6473	US-40 & SR-88 INTERSECTIONS, UINTAH COUNTY	Intersection improvement	1.25
	6636	US-40; MP 126.5 TO MP 130.0	Passing lanes	7.00
	7094	US-40; PASSING LANES AT FT. DUCHESNE	Passing lanes	2.42
	8182	SR-73; RANCHES ROAD TO REDWOOD ROAD	Roadway widening	2.17

**Reg. 3 Total** **192.21**

Reg. 4	Pin	Project Location	Project Concept	Added Lane Miles*
	5796	I-15; Bluff Street Interchange Improvements	Interchange improvements	0.75
	6475	US-6; MP 218.7 TO EMMA PARK ROAD	Roadway reconstruction with widening	3.43
	7035	SR-10; Quitchupah Hill Climbing Lane	Passing lanes	2.71
	7178	SR-10; HORSESHOE DUGWAY TO CARBON COUNTY LINE	Lengthen passing lanes and pavement rehab	7.69

**Reg. 4 Total** **14.58**

**Statewide Total** **257.90**

\*-A Surface Area is an area 1 mile (5280 ft.) long and one lane (12 ft.) wide. It's value is generally larger than the Lane Mile value and represents the total surface area that requires maintenance activities. Surface area calculations account for average shoulder widths beyond the width of the lanes. For example: A 1 mile long road that has 2-12 ft. lanes, with average shoulder widths of 6 ft. on each side, would have an average overall average width of 36 ft. The number of Lane Miles would be 1 mile x 2 lanes = 2 Lane Miles. The number of Surface Areas would be (1 mile x 36 ft./12) = 3.



**REQUEST FOR INCREASE IN FUNDS FOR FY 2013 BUDGET - SUPPORTING DETAIL**

Attach additional supporting detail if necessary

<b>Description:</b>	<b>Maintenance Cost Increase due to added features -TIF/CHNF Projects</b>			<b>Priority No. 1</b>
<b>Program Name:</b>	Feature Inventory	<b>Check One:</b> Ongoing	One-time <input checked="" type="checkbox"/>	<b>Legislation Needed?</b> No
<i>Provide a three-year history and two-year projection of the workload, caseload, or other measure for this program or service:</i>				
<b>FY 2009 Actual:</b>		<b>FY 2012 Projected Total:</b>		
<b>FY 2010 Actual:</b>		<b>FY 2013 Projected Total:</b>		\$1,908,460
<b>FY 2011 Actual:</b>		<b>FY 2011 Projected % Increase:</b>		

In the space below, show **computation details** outlining how the requested amount is determined. Include FTE needed & the payroll cost for each; additional space requirements; the types and amounts of equipment and related cost; the number of individuals served by the request and the annual service cost per individual; and similar data for all other expenses.

Estimated cost increase due to transportation system improvement is calculated by determining the number of additional items requiring maintenance, then multiplying by three-year average statewide unit cost to maintain those items during FY2008-2010. FY2010 is the last full reporting year available at the time the estimate was prepared.

No indirect charges were included as it is assumed that station operating costs, such items as utilities, building repair, training, leave, fixed equipment costs, etc., will not increase significantly due to increasing workload.

Costs for each type road component, such things as pavement, guardrail, drains, signs, paint striping, are summed for each region and the total estimated cost increased is summed.

For ease of presentation, the number of lane-miles of added pavement was selected to represent the diverse costs going into the total cost. This was done to allow a representative measure of changes rather than requiring the reader to plow through pages of breakouts. Additional features are derived from the projects that have been completed in the previous fiscal year and are scheduled to be completed by the end of 2012 calendar year. These projects were initiated in previous year's Statewide Transportation Improvement Plan, each of which has a potential of a maximum of 80 classes of additional items requiring maintenance. To present this data in other than a condensed representation would burden the reader.

The increases are presented by region with an accompanying map that shows relative geographic distribution of added pavements.

Individuals served

Road users in all twenty nine counties where major and minor projects added roadway features requiring maintenance.

**Budget Increase Summary**

Financing	FY 2013
General Fund	
School Funds	
Transportation Fund	1,908,460
Federal Funds	
Dedicated Credits	
Restricted Funds	
Transfers (specify)	
Other (specify)	
Beginning Balance	
<b>Total Financing</b>	<b>\$1,908,460</b>

Expenditures	FY 2013
Personal Services	
In-State Travel	
Out-of-State Travel	
Current Expense	1,908,460
DP Current Expense	
DP Capital	
Capital Outlay	
Pass Thru/Other	
<b>Total Expenditures</b>	<b>\$1,908,460</b>
<b>Positions:</b>	

**Percentage Increase of Request**

FY2012 Base Budget for this Program	
FY2012 Requested % Increase	0.0%

Department: Transportation

Contact: Richard Clarke

Line Item/Division:

Phone Number: 801-965-4120

**REQUEST FOR INCREASE IN FUNDS FOR FY 2013 BUDGET**

Prepare separate Forms 400 for each budget increase - Attach Form 400A with each Form 400

<b>Description:</b>	<b>Maintenance Cost Increase due to added features -TIF/CHNF Projects</b>		<b>Priority No. 1</b>
<b>Program Name:</b>	Feature Inventory	<b>Check One:</b> Ongoing      One-time <input checked="" type="checkbox"/> X	<b>Legislation Needed?</b> No

*Please provide a detailed description of this request including the problem or need this request will resolve. (all financial calculations should be included on Form 400A)*

215.90 lane-miles of additional roadway will be added to the state system during FY2013 that require routine maintenance activities. In order to maintain these additional pavements and roadways in an acceptable operating condition, additional funding is needed. It is imperative that these investments in infrastructure be maintained to ensure safety for the traveling public.

*What changes in program(s), service(s), expenditure(s), fee(s), etc. will be made if this request is not funded?*

If this request is not funded, the level of service on Utah roads will decrease, because the added lane miles will dilute resource availability for maintenance needs on all roads in the state system. New pavements, safety features, bridges, and roadside appurtenances will require service. Existing roads will continue to require maintenance. Maintenance crews will be constrained by having to spread existing work hours, equipment, and funding to cover more lane-miles. The result will be decreased service levels.

*Indicate any additional funding above the amount being requested that might be required for this request in future years:*

Future growth in the number of lane-miles maintained will further reduce funding available for maintaining the existing system. As long as capacity improvements are made by adding lanes, safety improvements, adding freeway interchanges, and widening roads, there will be additional physical features to maintain. Maintaining these added pavements requires additional funding to maintain current levels of service.

*What are the goal(s), objective(s), and performance measure(s) that directly relate to this request; and how will they be impacted?*

Following the philosophy that "Good Roads Cost Less", UDOT's goal is to preserve and maintain the transportation infrastructure. UDOT annually establishes a level of service for each roadway in the state. These target service levels are based on traffic volume, safety considerations, and integration of the roadway in the overall state transportation system. A key element of system preservation is proactive maintenance. Proactive maintenance consists of those activities done on a routine basis to keep the road network functioning safely, including filling potholes, cleaning drains, paint striping, and snow removal. Attainment of service levels and defining proactive maintenance activities is measured using the Maintenance Management Quality Assurance (MMQA) program.

*Please fill out this section if this request is mandatory (mandatory requests are more likely to be funded)*

*What is the authority reference mandating this request? (i.e. federal law, state law, court action, governor's initiative)*

*Describe why you think this request meets a mandatory definition. (public health and safety requests must constitute an emergency or critical need)*

Department: Transportation

Contact: Richard Clarke

Line Item/Division:

Phone Number: 801-965-4120

**LANDS & BUILDINGS  
SUPPLEMENTAL  
INCREASE**



**Araxy Black - FY12 Supplemental Increase**

---

**From:** Bill Juszczak  
**To:** Araxy Black  
**Date:** 6/27/2011 11:51 AM  
**Subject:** FY12 Supplemental Increase  
**CC:** Richard Clarke

---

We finally received bids for the replacement of the sewer system at the Overlook rest area. The cost to place this system is far greater than anticipated or that the budget can absorb. I would therefore like to request a supplemental budget increase for FY12.

The rest area was designed to serve a rather small population, with generous maximum effluent of 4,000 gallons per day. Most summer days we exceed that number and the maximum usage has been almost triple the anticipated. With such high usage the leach field became overloaded in a matter of 4 years and raw sewage began surfacing last summer. In reviewing all of the usage numbers and conditions, DEQ and the Health Department have required a much more sophisticated treatment system. The total cost for this replacement system, including fees, is \$500,000.

I request that we put forward a supplement increase to the Lands & Buildings budget for FY12 of \$500,000 to cover this unexpected expense.

Thank you.

## REQUEST FOR INCREASE IN FUNDS FOR FY 2012 BUDGET - SUPPORTING DETAIL

Attach additional supporting detail if necessary

Description: Rest Area Maintenance <u>Bear Lake</u>		Priority No.
Program Name: Lands & Buildings	Check One: Ongoing    One-time <input checked="" type="checkbox"/> X	Legislation Needed?
Provide a three-year history and two-year projection of the workload, caseload, or other measure for this program or service:		
FY 2008 Actual:	\$ -	FY 2011 Projected Total: \$ -
FY 2009 Actual:	\$ -	FY 2012 Projected Total: \$ 500,000
FY 2010 Actual:	\$ -	FY 2012 Projected % Increase: 0.0%

In the space below, show *computation details* outlining how the requested amount is determined. Include FTE needed & the payroll cost for each; additional space requirements; the types and amounts of equipment and related cost; the number of individuals served by the request and the annual service cost per individual; and similar data for all other expenses.

The amount was determined through bidding.

## Budget Increase Summary

Financing	FY 2012
General Fund	
School Funds	
Transportation Fund	500,000
Federal Funds	
Dedicated Credits	
Restricted Funds	
Transfers (specify)	
Other (specify)	
Beginning Balance	
<b>Total Financing</b>	<b>\$500,000</b>

Expenditures	FY 2012
Personal Services	
In-State Travel	
Out-of-State Travel	
Current Expense	
DP Current Expense	
DP Capital	
Capital Outlay	500,000
Pass Thru/Other	
<b>Total Expenditures</b>	<b>\$500,000</b>
Positions:	

## Percentage Increase of Request

FY12 Base Budget for this Program	
FY12 Requested % Increase	0.0%

Department: Transportation  
Line Item/Division: Operations

Contact: Ahmad Jaber  
Phone Number: 965-4895



# EQUIPMENT NEEDS

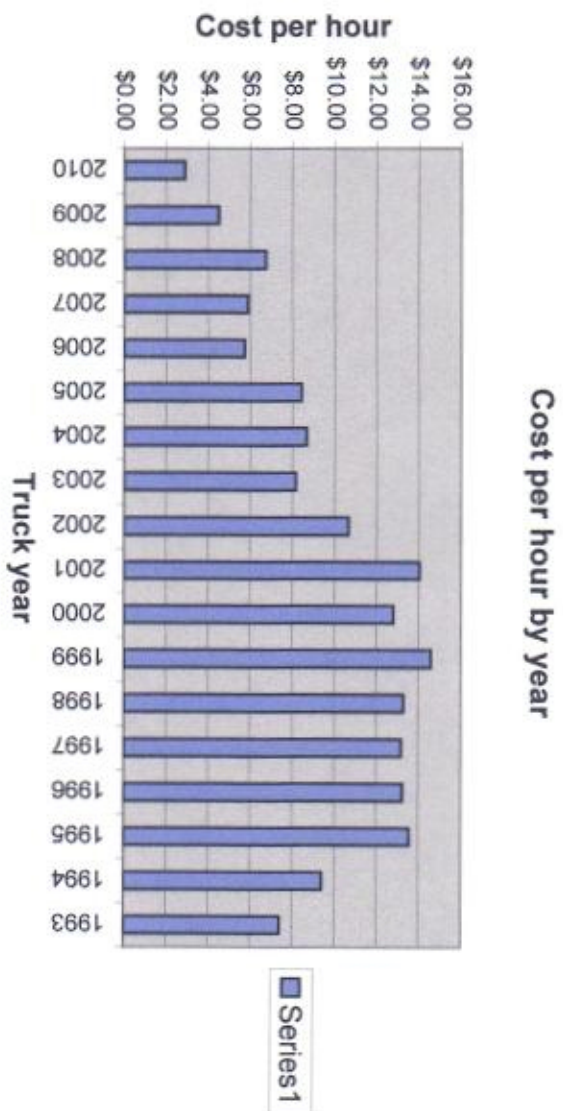
### **Equipment Replacement - Restoration to pre-FY2009 Funding Level**

We request restoration of equipment purchasing to the pre-FY2009 level of \$8,300,000 per year. Annual legislative funding for equipment was reduced to \$5,000,000 in FY2010. The current replacement value of UDOT equipment that has past its service life is \$22,200,000. By 2025 the unfunded replacement value will grow to \$100,700,000 if the current funding level is maintained. This deficit represents an increase in the average age of our truck fleet from the current 9.8 years to 14.8 years by 2025. This is critical because our experience has shown that maintenance costs increase dramatically as vehicles pass ten years service. Restoring equipment funding to pre-FY2009 level will reduce unfunded equipment replacement needs to \$51,500,000 while reducing average truck age to 8.9 years and will avoid increased vehicle maintenance costs.

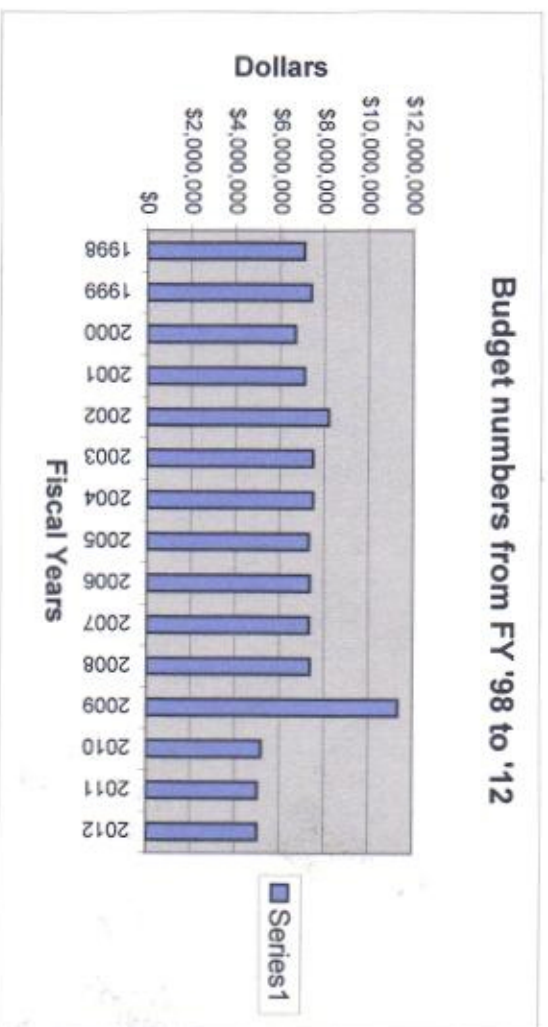
UDOT plow truck repair costs per usage hour are presented in Figure 1 below. At around ten years service, repair costs begin to escalate sharply and remain higher than prior year's costs. The cost spike represents major repair costs. As the trucks age past fifteen years service then tend to be used less, hence the drop in repair costs. Another factor reflected in lower later costs is repair deferral late in the vehicle's life cycle pending trade-in.



Cost Per Hour	
Year	CPH
2010	\$2.87
2009	\$4.48
2008	\$6.73
2007	\$5.88
2006	\$5.72
2005	\$8.42
2004	\$8.67
2003	\$8.15
2002	\$10.66
2001	\$14.04
2000	\$12.79
1999	\$14.57
1998	\$13.29
1997	\$13.18
1996	\$13.24
1995	\$13.55
1994	\$9.39
1993	\$7.40



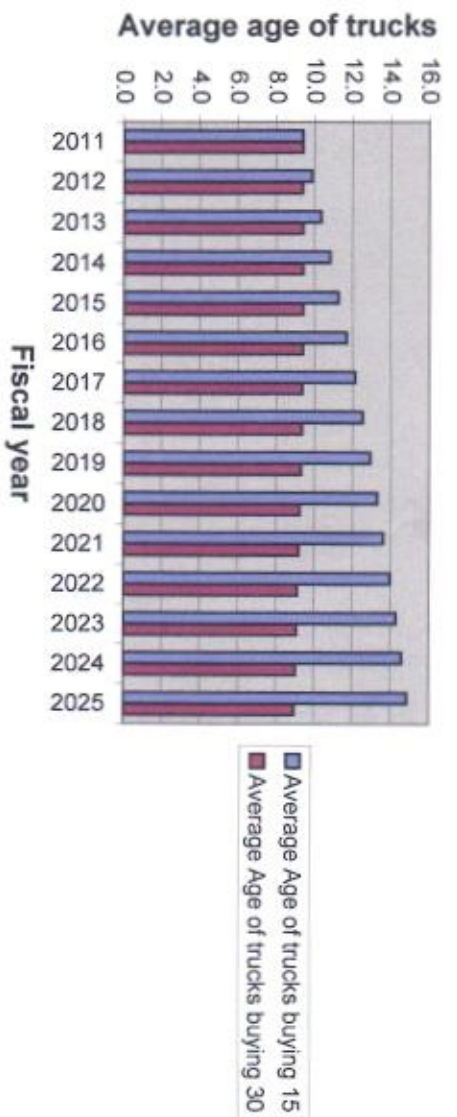
Fiscal Year	Budget
1998	\$7,082,700
1999	\$7,381,200
2000	\$6,683,400
2001	\$7,090,400
2002	\$8,206,800
2003	\$7,490,200
2004	\$7,490,200
2005	\$7,305,200
2006	\$7,350,200
2007	\$7,321,160
2008	\$7,369,200
2009	\$11,336,600
2010	\$5,172,200
2011	\$5,022,200
2012	\$5,022,200





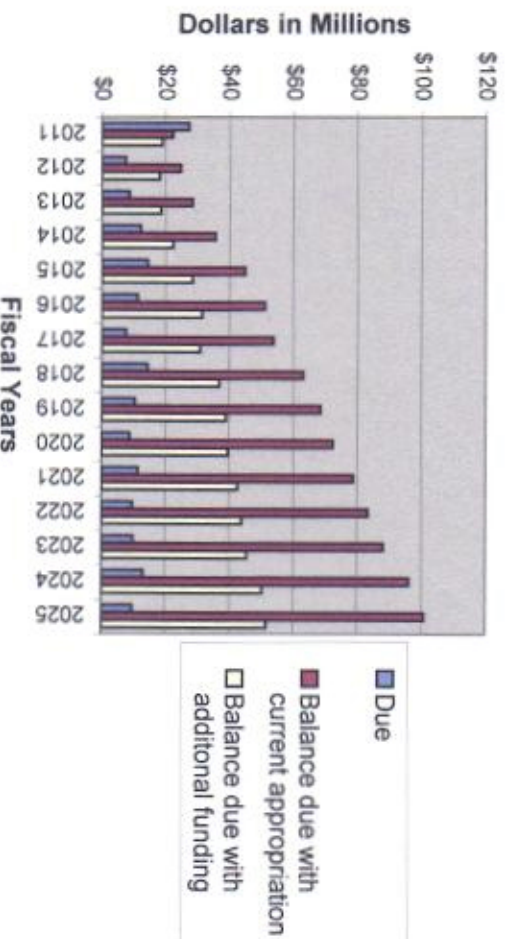
Budget Year	Average Age of trucks buying 15	Average Age of trucks buying 30
2011	9.365	9.365
2012	9.838	9.351
2013	10.321	9.373
2014	10.794	9.389
2015	11.253	9.397
2016	11.689	9.365
2017	12.118	9.359
2018	12.517	9.323
2019	12.916	9.293
2020	13.285	9.230
2021	13.629	9.164
2022	13.968	9.112
2023	14.277	9.056
2024	14.571	9.004
2025	14.850	8.936

Buying 15 trucks per year vs 30



Year	Due	Balance due with current appropriation on	Balance due with additional funding
2011	\$27.2	\$22.2	\$18.9
2012	\$7.4	\$24.7	\$18.1
2013	\$8.6	\$28.3	\$18.5
2014	\$12.1	\$35.5	\$22.3
2015	\$14.3	\$44.8	\$28.4
2016	\$11.2	\$51.0	\$31.4
2017	\$7.6	\$53.7	\$30.8
2018	\$14.3	\$63.0	\$36.8
2019	\$10.4	\$68.4	\$38.9
2020	\$8.8	\$72.3	\$39.5
2021	\$11.3	\$78.6	\$42.5
2022	\$9.6	\$83.2	\$43.8
2023	\$9.8	\$88.0	\$45.4
2024	\$13.0	\$96.0	\$50.2
2025	\$9.6	\$100.7	\$51.5

Due for trade with extra funds 5.0 to 8.3 million



\* Note: Dollar values are in millions.

### **Replace Region 4 West Snow Blower**

\$630,000 is requested for a one-time purchase of a new Oshkosh Model H-3226 Road Blower to replace the current Cedar Mountain snow blower located in Region 4 West District with a higher capacity machine this replacement will reduce road closure duration due to out-of-service equipment. The replacement equipment will service SR-14 (Cedar Mountain).

Enclosed is a copy of a proposed lease option for financing from Oshkosh Capital. A lease/buy-back plan was not considered due to the low demand for this type equipment, small resale market, and high depreciation.





June 9, 2011

**SALES ORGANIZATION:** Oshkosh – Harold Ness  
**LESSEE:** Utah DOT  
**TYPE OF EQUIPMENT:** Oshkosh H-3226 Road Blower  
**EQUIPMENT COST:** \$ 580,000.00  
**CUSTOMER DOWNPAYMENT:** \$0.00  
**TRADE-IN:** \$0.00  
**DELIVERY TIME:** Months  
**PAYMENT MODE:** Annual In Arrears  
**FIRST PAYMENT DUE DATE:** 1 Year After Lease Commencement  
**LEASE COMMENCEMENT DATE:** Upon contract signing with Oshkosh

Term	Number of Payments	Payment Amount
3 Years	3 Annual	3 @ \$152,574.27 1 @ \$160,500.00 due with final payment
5 Years	5 Annual	5 @ \$112,354.10 1 @ \$80,250.00 due with final payment

The above listed payment(s) reflect program discounts available exclusively through Oshkosh Capital. There are no documentation or closing costs associated with the completion of this financing.

**TYPE OF FINANCING:** Tax-exempt Lease Purchase Agreement with a \$1.00 buy out option at end of lease term. Said agreement shall be a net lease arrangement whereby lessee is responsible for all costs of operation, maintenance, insurance, and taxes.

**BANK QUALIFICATION:** This proposal assumes that the lessee will not be issuing more than \$10 million in tax-exempt debt this calendar year. Furthermore, it is assumed that the lessee will designate this issue as a qualified tax-exempt obligation per the tax act of 1986.

**LEGAL TITLE:** Legal title to the equipment during the lease term shall vest in the lessee, with Oshkosh Capital perfecting a first security interest

**AUTHORIZED SIGNORS:** The lessee's governing board shall provide Oshkosh Capital with its resolution or ordinance authorizing this agreement and shall designate the individual(s) to execute all necessary documents used therein.

**LEGAL OPINION:** The lessee's counsel shall furnish Oshkosh Capital with an opinion covering this transaction and the documents used herein. This opinion shall be in a form and substance satisfactory to Oshkosh Capital.

**VOLUNTEER FIRE DEPARTMENTS:** If Lessee is a Volunteer Fire Department, a public hearing under the requirements of Section 147(f) of the Internal Revenue Code of 1986 shall be conducted to authorize this transaction. It is recommended that a notice of the public hearing be published 10 to 14 days in advance of the public hearing.

This proposal will be valid for thirty (30) days from the above date and is subject to final credit approval by Oshkosh Capital and approval of the lease documents in Oshkosh Capital's sole discretion. To render a credit decision, lessee shall provide Oshkosh Capital with their most recent two years' audited financial statements, copy of their most recent interim financial statement, and current budget.

Accepted by:

Proposal submitted by:

Lessee

Date

Oshkosh Capital



Oshkosh Capital, 155 E. Broad St., Locator 16-0056, Columbus, OH 43215  
Phone: (800)820-9041, ext. 1 / Fax: (800)678-0602